LIST OF CLAIMS, SHOWING THE STATUS OF EACH CLAIM

Underlining denotes added text while strikethrough denotes deleted text.

IN THE CLAIMS:

1. (Currently Amended) A method of producing a transformed microorganism, comprising:

(i) ~~selecting~~ providing a competent microorganism, wherein said organism is a *Bacillus sp*;

(ii) producing a DNA construct *in vitro*, wherein said DNA construct comprises an incoming sequence of interest, flanked on each side by a homology box, wherein said homology boxes are flanked by non-heterologous sequences which are non-critical targets for said microorganism to initiate uptake of said DNA construct; and

(iii) directly transforming said microorganism with said DNA construct such that the DNA construct becomes integrated into a the chromosome of said microorganism.

2. (Cancelled)

3. (Cancelled)

4. (Currently Amended) The method of claim 13, wherein said *Bacillus* is a super-competent strain.

5. (previously amended) The method of claim 4, wherein said super-competent *Bacillus* is a Pxyl-comK strain.

6. (Currently Amended) The method of claim 1, wherein said incoming sequence of said DNA construct comprises homologous DNA selected from the group consisting of wild-type, mutagenized and modified DNA.

7. (Currently Amended) The method of claim 1, wherein said incoming sequence of said DNA construct comprises heterologous DNA selected from the group consisting of wild-type, mutagenized and modified DNA.

8. (Cancelled)

9. (Currently Amended) The method of claim ~~8~~ 1, wherein said DNA construct further comprises stuffer sequences, wherein said stuffer sequences flank said non-homologous sequences that flank said homology boxes.

10. (original) The method of claim 1, wherein said DNA construct is a non-plasmid DNA construct.

11. (original) The method of claim 1 wherein the DNA construct is produced without the use of a shuttle vector or an intermediate host.

12. (Currently Amended) The method of claim 1, further comprising the steps of selecting a target sequence in a chromosome of said competent microorganism, and increasing the amount of sequence homology between said target sequence and at least one of said homology boxes flanking said incoming sequence of interest in said DNA construct.

Claims 13-19. (cancelled)